

P.O. Box HM 2116, Hamilton, HM JX, Bermuda bermudabotanical.org bdabotanicalsociety@gmail.com

SEPTEMBER NEWSLETTER 2017 FROM THE EDITOR:

Dear Members,

Last year at this time I wrote that we had reached a sad impasse among the Executive of the Bermuda Botanical Society. Several of us had served for eight years or more, and we were tired.

At the AGM 2016, which was attended by over 30 people, everyone seemed to feel that the society must continue, but we acquired just two new members for the Executive – Christine Watlington and Molly White. Molly has been serving as President for the past year.

However, neither Molly nor Christine is willing to stand again, because their full lives lead them in other directions. I am therefore requesting nominations for the following positions:

PRESIDENT
VICE-PRESIDENT
SECRETARY
TREASURER
PLANT SALE ORGANISER
NEWSLETTER EDITOR
GENERAL MEMBERS OF THE EXECUTIVED

Please submit names by email to me;

helle@transact.bm

Our AGM is scheduled for Sunday, October 29, 3:00 pm in the Horticultural Hall, Botanical Gardens. Again we need to decide whether the society goes on or is dissolved.

BLIND BOTANIZING

BY GEORGE PETERICH

Humans have 5 senses in total. I assume that the sense of smell is in the fifth place. On a walk on the Railway Trail I realized that one can identify a number of plants by the fragrance of their flowers, even when they are not in view.

Readers may remember my story about the runner and the old botanist on the railway trail, which unfortunately led to some misinterpretations. Let's forget that and let me now name a few striking examples.

Fiddlewood (*Citharexylum spinosum*) is one of them. These trees have flowers almost in any of the warmer months, that is: some of them early, others later, so one may see flowers on one tree and fruit on another one at the same time. The fragrance cannot be missed, and once known, it is unmistakeable.

The Asparagus Fern, (Asparagus densiflorus) can be found almost in all the various habitats in Bermuda. The plant is densely covered in flowers, hence its name. It spreads a lot of fragrance, which is very similar to that of its relative, the infamous Sickle-thorn Asparagus (A. falcatus).

The Frangipani (Plumeria *rubra* and *P. alba*) is not found in the wild, but it spreads its fragrance well beyond the boundaries of gardens and parks. It is so strong that, when close, it "grabs you be the nose" just as a field of Hyacinths would do – something that fortunately does not occur in Bermuda. Another strong and unmistakeable scent is spread by the Mock Orange shrub (*Muraya paniculata*). It does remind one of the scent of an orange grove.

And talking about really strong scents, the Lady of the Night (*Brunfelsia americana*) opens its flowers after dark for insects that fly in the night, and so strong is its fragrance

that it would be possible to pinpoint the shrub in a garden on a moonless night.

Back to the daylight, there is nothing as sweetly fragrant as the Oleander (*Nerium oleander*). Oleanders originate in the Mediterranean, and when there is a rainless period in the summer, they really come into flowers, just as they would in the summer in Italy. The fragrance reminds one of vanilla, just as the Pinkball Tree (*Dombeya wallichii*) does. The fragrance of that shrub is so attractive, and also for bees, that I must warn myself not to sniff the flowers too closely, for I might get a bee in my nose.

Winter is the time for the Loquat (*Eriobotria japonica*) to bloom. The fragrance they spread is definitely my favourite. I think I wrote about that before, comparing the fragrance with that of a tiny orchid in the Swiss Alps, *Nigritella nigra*. On a walk in the mountains there I saw it in the grass, a plant not higher than a few inches. I bent over and got that scent. I have been fascinated with it ever since.

So whenever sight is not available, or inadequate, let the fifth sense do its job!

THE OLD SEA VIEW GARDENS BY CHRISTINE WATLINGTON

My history with the old Sea View property began when I arrived in Bermuda in 1977. Bayfield Clark, the owner of the property, and his wife invited me for tea and a lovely tour of their gardens. It was the culmination of years of a lifetime collecting plants.

There were 3.ponds of various sizes, one with masses of bulrush. Darting through the tall rushes one could see a bronze statue of Waxwings in flight. It was utterly delightful and Bayfield Clark was totally charming. As you all know, a certain energy from like-minded people brings such enrichment.

The larger pond, about 60 feet across, was graced with the Sacred Lotus Water Lily about 100 flowers! Breathtaking! Along the edge one could see other pond plant species, Iris and Forget-me nots (which transported me back to my childhood). The gardens were full of statuary and-a remarkable plant collection, the vistas breathtaking, a romantic surprise on every corner, tumbling flora I had not seen before. Turning a corner onr would find a long vista with towering Royal Palms, Bamboo Palms, ferns and Bromeliads along borders.

The greenhouse was full of fascinating seedlings and along the back corner masses of pineapples, about 30 fruits at a glance.

The Rose garden was so full of roses that one just wanted to jump into the perfect scented picture.

Towards the coastal path was the fruit garden, which was struggling but charming, the old fruit trees consisting of orange grapefruit, and fig doing quite well. Three massive avocado trees were full of fruit.

Years went by. Life was full...One day I picked up the phone and a voice said, 'Christine, this is David Bowie. I have bought your book and I have rented SEA VIEW GARDENS. I wondered if you would come walk the grounds with me.'

Some might have passed out at the thought of meeting David but he was not on my radar in a big way. I had been into the study of plants and travel since I was eighteen, while..these were his wild years. After a lovely visit with David and Iman I promised I would make them a list of good plants to include in their garden.

The next morning David called again. I went back to visit at 6pm. They asked if I would work with them. It seemed a perfect chance to work in a great garden. I so missed my days at KEW and WISLEY. I missed a certain energy that is hard to convey - one only knows it when one is in it (it's more than joie de vivre, it's an energy that enriches the spirit and David and Iman exuded it.

Five seemingly endless wonderful years later the Bowies left to live in a New York rooftop penthouse. Sea View Gardens was abandoned once more and rumours in the village of building condos on the land and storm surge creeping into the Gardens were distressing. Then Cambridge Beaches bought the Long Beach and most of the land up to the old Sea View House. I went along to a meeting to discuss projects to save the now almost desolate gardens, the fruit trees long since fallen and covered with Mexican pepper and other invasive plants, the long vista covered with fallen trees, the rusty old greenhouse with broken glass covered in morning glory. The lotus lily pond was clogged with Papyrus grass with a tiny of sign of lotus leaves trying to pop up but no space to grow.

We slowly started restoration and at one point it was handed over to me to look after. I kept it going, leaving massive areas that I could not get to and focusing on the main features. I designed a labyrinth with coastal edible scented plants and herbs.and for 10 years the gardens enjoyed a revival, loved by locals and tourists from all over the world. Due to recession etc. Cambridge Beaches had to once again cut the old Sea View Estate off their daily working grid, giving only the occasion time to go cut lawns.

A few years passed until February this year I got a call from management to come work part time for the season to once again restore the gardens. Happy to report that I have restored the lost labyrinth into a romantic area where one can sit and enjoy peace; also I have restored the old rose garden and pergola,...using giant bamboo from my garden.



Above is a picture of the old wall now in full flower with lovely vines..such as the old Bermuda scrambling Roses, Coralita, Petrea, Garlic Vine and Trumpet.





Pictures by Christine Watlington of the Sea View Gardens.

RAIN LILIES GALORE! BY LISA GREENE

The rain lilies (*Zephyranthes citrina*) in St. George's Parish are outstanding at the time of writing, with large patches of yellow flowers springing up through the grass in ever-increasing numbers of patches throughout the parish – even in the grass around the airport runways. Rain lilies get their common name because they tend to flower after rain; they are also known as the Bermuda crocus.

The rain lily is closely related to spider lily, crinum lily, narcissus, Agapanthus, onion, garlic and leek – all of which grow in Bermuda.



Food for thought from the Climate Reality Project.

In an article titled Soil Health and the Climate Crisis, a number of interesting points jumped off the page:

"It's not the sort of thing that inspires a telethon, but over time the toll of erosion, pollution, losses in organic matter, and other soil impacts of the climate crisis imperil a very basic human need – to eat. The health and vitality of soil everywhere, from the smallest backyard garden to the largest Midwestern farm, plays an integral role in food production and it's threatened by climate change."

"The story of soil health is really about water. The climate crisis has fundamentally altered the water cycle around the world. The result is shifting precipitation patterns and increased evaporation that in turn cause more frequent severe rainfall events and more severe droughts. In many areas, rainfall has become either increasingly abundant or in desperately short supply, relative to long-time averages."

/

"In coastal areas, sea-level may lead to increased groundwater salinization as the salty sea floods further inland. This will compromise the availability of fresh water, including that used for drinking and farm and garden irrigation."

"... a big problem... when people talk about climate change is that they don't emphasize enough the risk to food production... and that really short-changes some of the arguments and the concerns down the road. The idea that you could have millions of migrants moving all over the world because they can't eat, and the disruption and instability that creates doesn't get enough appreciation in the world."

Now is the time to start thinking about getting your vegetable garden going! If you need a little motivation, this statement from a paper in the journal Landscape and Urban Planning, Vol. 157, Jan. 2017 might inspire you to get started: "Every kilogram of vegetables you grow yourself can reduce the dangerous emissions causing climate change by 2 kilograms, if you utilize household grey-water and compost organic waste."

If you don't have a lot of space, don't let that stop you. A small raised bed, or even a few planters or large window box, can be room enough to grow several lettuce or spinach plants. Make it really easy and purchase seedlings from the nursery. There's nothing like harvesting a few of the older leaves and having a fresh salad! As long as the weather doesn't get too hot – and as long as you don't over-harvest - a lettuce or spinach plant will keep on producing for many weeks. If you end up growing too much for your own use, a neighbour or charity would probably be happy to receive your excess bounty.

From The Guardian:

Alarm as study reveals world's tropical forests are huge carbon emission source

Forests globally are so degraded that instead of absorbing emissions they now release more carbon annually than all the traffic in the US, say researchers.

The study measured the impact of disturbance and degradation – the thinning of tree density and the culling of biodiversity below an apparently protected canopy. Photograph: AFP/Getty Images

Jonathan Watts

Thursday 28 September 2017 19.00 BSTLast modified on Thursday 28 September 2017 19.01 BST

The world's tropical forests are so degraded they have become a source rather than a sink of carbon emissions, according to a new study that highlights the urgent need to protect and restore the Amazon and similar regions.

Researchers found that forest areas in South America, Africa and Asia – which have until recently played a key role in absorbing greenhouse gases – are now releasing 425 teragrams of carbon annually, which is more than all the traffic in the United States.

This is a far greater loss than previously thought and carries extra force because the data emerges from the most detailed examination of the topic ever undertaken. The authors say their findings – <u>published in the journal Science on Thursday</u> – should galvanise policymakers to take remedial action.

"This shows that we can't just sit back. The forest is not doing what we thought it was doing," said Alessandro Baccini, who is one of the leader authors of the research team from Woods Hole Research Center and Boston University. "As always, trees are removing carbon from the atmosphere, but the volume of the forest is no longer enough to compensate for the losses. The region is not a sink any more."

The study went further than any of its predecessors in measuring the impact of disturbance and <u>degradation</u> – the thinning of tree density and the culling of biodiversity below an apparently protected canopy – usually as a result of selective logging, fire, drought and hunting.

This can reduce biomass by up to 75%. But it is more difficult for satellites to monitor than deforestation (the total clearance of foliage) because, when viewed from above, the canopy appears uninterrupted despite the depletion underneath.

To get more accurate data, scientists combined 12 years of satellite data with field studies. They found a net carbon loss on every continent. Latin America – home to the Amazon, the world's biggest forest – accounted for nearly 60% of the emissions, while 24% came from Africa and 16% from Asia.

Overall, more carbon was lost to degradation and disturbance than deforestation. The researchers stressed this was an opportunity as well as a concern because it was now possible to identify which areas are being affected and to restore forests before they disappeared completely.

"Prior to this we knew degradation was a problem but we didn't know where or how much," said Wayne Walker, another of the lead authors. "It's easier to address the problem when there is still some of the forest left standing."

The priority is to protect pristine forests with high carbon density. The most effective way of doing this, he said, was to <u>support land rights for indigenous people</u>. "Those living in the forest can make a difference," Walker said.

Unfortunately, many governments whose territories are home to tropical forests are moving in the opposite direction. In Brazil and Colombia, for example, deforestation has accelerated rapidly in the past year.

"When I look at these numbers and the map of where the changes are occurring, it's shocking," said Baccini, who has a two-year-old son. "My child may not see many of the forests. At this rate of change, they will not be there."

But he said the numbers should be a driver for action. "We need to be positive. Let's turn tropical forests back into a sink. We need to restore degraded areas" he said. "As far as technology for reducing carbon is concerned, this is low-hanging fruit. We know how to protect and sustain forests. It's relatively cost effective"

2017 SCHOLARSHIPS



On Wednesday 9th August, on the steps of City Hall, the Bermuda Botanical Society held a presentation ceremony for three very worthy scholarship recipients, Tiffany Bean, Shane Antonition and Amber Reid.

Tiffany is about to commence an Environmental Science degree at Trent College, Peterborough, Ontario, Canada and received \$4,000.

Shane is studying for a Masters in Environmental Management in Plymouth, England and received \$3,000.

Amber is entering her third year at Northwestern in Boston, USA studying Environmental Science and received \$3,000.

Scholarship Chairman Peter Lee & Committee member George Peterich congratulated all the recipients and wished them well with their studies in the coming year. Mr Lee noted that having been a past recipient of this award, he was delighted to give his support and encouragement to individuals pursuing further education in the botanical and environmental sciences.

TRIVIUM NO. 20 BY GEORGE PETERICH

Monkey's Dinner Bell, also known as Sandbox Tree (*Hura crepitans*) has fruits that when ripe and dry, explode. The seeds are thrown around at a speed, which can be 240 km/h (150 mph)! This happens with a loud crack, which is why the tree is also calledDynamite Tree.



I did not know that; otherwise I would have warned my audience on the tours of the Botanical gardens to be prepared to take cover.

You can find the tree on your way from the Visitor Centre towards the Sensory Garden, along the path that is paved with bricks. The trunk is full of spines, and I often told the

tourists who asked me why that was, that is was to keep the monkeys from ringing the bells. I had first told them that the tree was named because of the shape of the fruits, even though I had never seen a dinner bell shaped like it. But now, reading on the Internet I founds that the tree also had the name Monkey Don't Climb Tree.

The origin of the name Sandbox tree would be another Trivium. It can be found on Wikipedia.

See you all at the AGM ON SUNDAY, OCTOBER 29, HORTICULTURAL HALL, BOTANICAL GARDENS.
